

Claims 1-17 are pending; Claims 1 and 3-10 have been amended; and Claims 11-17 have been newly added by this amendment. It is respectfully submitted that no new matter has been added by this amendment.

In the outstanding Office Action, Claims 4 and 5 were objected to under 37 C.F.R. § 1.75(c); Claims 1-7 were rejected under 35 U.S.C. § 102(b) as anticipated by Granberg (U.S. Pat. No. 4,014,739); Claims 6 and 7 were rejected under 35 U.S.C. § 102(b) as anticipated by Greve (U.S. Pat. No. 5,770,016); Claim 8 was rejected under 35 U.S.C. § 103(a) as unpatentable over Greve in view of Hatton (U.S. Pat. No. 2,105,593); and Claims 9 and 10 were rejected under 35 U.S.C. § 103(a) as unpatentable over Greve in view of Schlör et al. (U.S. Pat. No. 4,853,087, hereafter Schlör).

Regarding the objection to Claims 4 and 5, the noted informalities have been amended herewith. It is therefore respectfully requested that this objection be withdrawn.

As for the rejection of Claims 1-7 under 35 U.S.C. § 102(b) as anticipated by Granberg, this rejection is respectfully traversed for the reasons discussed below.

When a mold with a net is used repeatedly for pulp producing molded articles, pulp fiber is adhered and accumulated on the net, which causes unevenness in a thickness of a molded article, or impairs the appearance of a molded article. Thus, in the past, it has been necessary for the net to be removed and cleaned. However, where a net is fixed to a paper molding part by welding, it is not easy to remove the net. Where a net is fixed with wire or the like, removal is possible but very laborious.²

In light of these difficulties, the Applicants developed the papermaking molds of the present invention. Claim 1 relates to a papermaking mold including a papermaking part of a prescribed shape, a net covering the papermaking part and at least part of a peripheral part of

² Specification, page 1, lines 12-17.

the papermaking part, and a fixing member disposed on the periphery of the net. The fixing member is directly attached to the peripheral part to fix the net, according to Claim 1.

Granberg relates to a mold construction having a removable base member. According to Granberg, each of the molds includes a relatively rigid perforated base member which may have one or more screen members secured against the product forming surface such that the pulp fibers are deposited on the screens.³ The annular groove 42 of Granberg and the body member 36 is adapted to receive the peripheral marginal edges of the base member 18 and overlying screens 30 and 32 of the foraminous mold means 14.⁴ The screens 30 and 32 of Granberg conform to the configuration of the base member 18 and therefore have marginal edges portions conforming to the marginal annular depression 18a in the base member 18. When the marginal edge of the base member 18 and associated marginal edges of the screen 30 and 32 are inserted into the groove 42, there will be substantially full surface contact of the lower marginal surface of the base member with the annular or V-shaped groove 42a and the body member 36. In fact, the U-shaped groove 42 of the body member 36 of Granberg serves to provide an interlocking relation between body member 36 and the base member 18 and overlying screens 30 and 32, so as to releasably retain the base member and associated screens in support relation within the groove 42 and the frame support means 16.⁵ As is evident from Figure 2 of Granberg, element 42b contacts the screen and then contacts the base 36. Therefore, it is evident that element 42b *does not directly connect* to the base.

By contrast, as noted above, the fixing member of Claim 1 is directly attached to the peripheral part to fix the net. As Granberg neither discloses or suggests that the fixing member may be directly attached to the peripheral part to fix the net, it is respectfully

³ Granberg, col. 1, lines 22-25.

⁴ Granberg, col. 4, lines 63 through col. 5, line 3.

⁵ Granberg, col. 5, lines 5-26.

submitted that independent Claim 1 and dependent Claims 2-5 patentably distinguish over Granberg.

Claim 6 recites a papermaking mold including a papermaking part of a prescribed shape, a peripheral part that extends outward from the papermaking part, and a papermaking net covering the papermaking part and at least part of the peripheral part. According to Claim 6, the flange prevents the net from receiving a clamping force.

In a conventional papermaking mold, a mold clamping force is applied to the peripheral part of the mold where the papermaking net is disposed so that a force is directly exerted on the net. As a result, the net is deformed upon clamping and gradually damaged from repetition of papermaking. This damage results in the need for a change of the net. Therefore, there has been a need for a papermaking mold having a net that does not suffer damage during clamping.⁶ In light of these difficulties, the Applicants developed the papermaking mold of Claim 6.

As noted above, Granberg relates to a mold construction having a removable base member. However, Granberg does not disclose or suggest the use of a flange to prevent the net from receiving a clamping force. Therefore, it is respectfully submitted that Claim 6 patentably distinguishes over Granberg.

Consequently, as Granberg neither discloses nor suggests the features of independent Claims 1 and 6, it is respectfully requested that the rejection of Claims 1-7 be withdrawn.

Regarding the rejection of Claims 6 and 7 under 35 U.S.C. § 102(b) as anticipated by Greve, this rejection is traversed. At the outset, it is important to note that Greve is not in an analogous area of art. Specifically, Greve relates to forming a fiber reinforced plastic pre-form. The Office Action states, at page 5, that Greve would be appropriate for a

⁶ Specification, page 1, lines 18-28.

papermaking process. However, there is no support in the teachings of Greve for this assertion.

Additionally, Claim 6 recites that the papermaking mold includes a papermaking part of a prescribed shape, a peripheral part extending outward from the papermaking part, a flange, and a papermaking net covering said papermaking part and at least part of said peripheral part. According to Claim 6, the part of the net that is covering the peripheral part is positioned so that the flange prevents the net from receiving a clamping force.

Greve, by contrast, does not disclose or suggest such a flange. It is therefore respectfully submitted that Claims 6 and 7 patentably distinguish over Greve, as Greve fails to disclose or suggest the limitations recited in Claim 6, from which Claim 7 depends. It is therefore respectfully requested that this rejection be withdrawn.

Regarding the rejection of Claim 8 under 35 U.S.C. § 103(a) as unpatentable over Greve in view of Hatton, this rejection is traversed. Claim 8 depends from Claim 6, which recites in relevant part “said part of the net which covers said peripheral part is positioned so that said flange prevents said net from receiving a clamping force.”

As noted above, Greve fails to disclose or suggest this feature. It is respectfully submitted that Hatton fails to remedy the above-noted defects of Greve.

Hatton relates to an apparatus for molding pulp bodies. Hatton describes that a wire mesh basket 20 is provided, shaped to contact the die face 11 of the lower die 10, having a metal band rim 21 supporting its upper edges, and to which rim are attached resilient hook members 22. These hook members of Hatton are aligned with apertures 28 in such a manner that the inner edge of each aperture 28 impinges on the inclined face 26 of the hook 22 when the plate is lowered, thereby forcing it outward as the hook moves through the aperture 28.⁷

⁷ Hatton, col. 2, lines 20-51.

From this description, it is evident that the wire mesh basket of Hatton is attached to the body by hooks. However, Hatton has no disclosure or suggestion of a flange that prevents the net from being subjected to clamping forces. Moreover, there is no recognition in the teachings of Hatton that such a flange would be useful in preventing damage to the net.

Consequently, as neither Greve nor Hatton discloses or suggests the features recited in Claim 6, it is respectfully submitted that Claim 8, which depends from Claim 6, patentably distinguishes over these references, either alone or in combination.

Moreover, it is respectfully submitted that there is no basis in the teachings of either Greve or Hatton to support the proposed combination. The Office Action certainly fails to point to any specific teachings within either of these references to support the applied combination. It is therefore respectfully submitted that this combination is based solely upon hindsight reconstruction.

With regard to the rejection of Claims 9 and 10 under 35 U.S.C. § 103(a) as unpatentable over Greve in view of Schlör, this rejection is respectfully traversed. Claims 9 and 10 depend from Claim 6. As noted above, Greve fails to disclose or suggest the features recited in Claim 6. It is respectfully submitted that Schlör fails to remedy the defects above-noted with respect to Greve.

Schlör relates to a process and apparatus for producing a filter with multiple folds. However, Schlör discloses or suggests no type of net to be used in the filter making process. Therefore, in the absence of any teaching regarding any type of net, Schlör necessarily fails to disclose or suggest a flange that prevents a net from receiving a clamping force.

Consequently, as neither Greve nor Schlör, either alone or in combination, disclose or suggest the features of Claim 6, it is respectfully submitted that dependent Claims 9 and 10 patentably distinguish over these references, either alone or in combination. It is therefore respectfully requested that this rejection be withdrawn.

Additionally, it is respectfully submitted that there is no basis in the teachings of either Greve or Schlör to support the proposed combination. Specifically, the Office Action fails to cite any specific teachings within either Greve or Schlör to support the proposed combination. Therefore, it is respectfully submitted that the combination of Greve and Schlör is based solely upon hindsight reconstruction.

Newly added Claims 11-17 are believed to patentably distinguish over the references of record for reasons analogous to those set forth for Claims 1-10. Support for new Claims 11-17 may be found, for example, in the non-limiting depiction Figure 2. It is therefore respectfully submitted that no new matter has been added by Claims 11-17 and that Claims 11-17 are in condition for allowance.

Consequently, in view of the foregoing discussion and present amendment, it is respectfully submitted that this application is in condition for allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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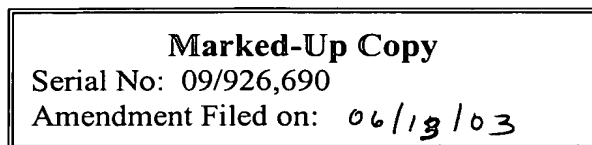
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IN THE CLAIMS

Please amend Claims 1 and 4-10 as shown below:

1. (Amended) A papermaking mold which comprises a papermaking part of a prescribed shape, a peripheral part extending outward from the peripheral edge of said papermaking part, and a net covering said papermaking part and at least part of said peripheral part, wherein a fixing member is disposed on the periphery of said net, and said fixing member is [fixed] directly attached to said peripheral part to fix said net [by said fixing member].

4. (Amended) The papermaking mold according to claim 1, wherein said papermaking part is configured to face a second papermaking part when the fixing member of the first papermaking part contacts a second fixing member of the second papermaking part [which is used as paired with another one in such a manner that the papermaking parts of the pair face each other and the fixing members of the pair are brought into contact with each other].

5. (Amended) The papermaking mold according to claim 1, [which is used as] configured to be paired with [another one] a second papermaking mold [in such a manner] so that the papermaking parts of [the pair] each mold face each other [so that said papermaking parts] to form a cavity of a prescribed shape in which a pulp slurry is [to be] injected to deposit pulp fiber on said net.

6. (Amended) A papermaking mold which comprises a papermaking part of a prescribed shape, a peripheral part extending outward from said papermaking part, a flange, and a papermaking net covering said papermaking part and at least part of said peripheral part, wherein said part of the net which covers said peripheral part [is disposed in the site where it does not receive a mold clamping force or it is not damaged by a mold clamping force] is positioned so that said flange prevents said net from receiving a clamping force.

7. (Amended) The papermaking mold according to claim 6, wherein [said site of said peripheral part where] said part of the net which covers said peripheral part is [to be disposed is] positioned lower than a surface [on which a] that receives the mold clamping force [is to be exerted by] a [certain level difference] predetermined amount.

8. (Amended) The papermaking mold according to claim 6, [which has] further comprising a means for adjusting [a] said mold clamping force.

9. (Amended) The papermaking mold according to claim 6, wherein a sealing member is provided on [said] a surface [on which a] that receives the mold clamping force is to be exerted.

10. (Amended) The papermaking mold according to claim 6, wherein [an] at least one of auxiliary sealing member [or] and a mold clamping force buffering member is provided on said part of the net which covers said peripheral part [or on said site of disposition].

Claims 11-17 (New)